A

Profile of

Department of Zoology

Remuna Degree College Remuna

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Department mail ID: rdczoology59@gmail.com

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BRIEF HISTORY OF DEPARTMENT

The Department of Zoology was opened in 2001 and since then only General course has been taught till 2015. From the academic session 2015-16 under F.M University the Department started teaching at the Honours level. The Department is now moderately equipped and is located in the Science Block of the College.

Name of the Department: Department of Zoology.

Year of establishment: 2001

College/ University- Remuna degree College Remuna, Balasore affiliated under Fakir Mohan University, Balasore, Odisha

Names of Programs / Courses offered: UG (B.Sc. Honours)

Sanctioned Strength - +3 Science (Hon's) – 48

Credit System –Semester system. (total 6 semesters)

VISION AND MISSION

VISION

To develop scientific attitude to get excellence in education, training & research in the field of Zoology where teaching and research encrust detailed understanding from microbes to human.

MISSION

1. To impart basic education and holistic understanding of Zoology by "redefining Zoology" to students of every age so that they develop interest inScience.
2. To develop teaching and research programme that has relevance to the society and employability.
3. To develop experimental skills of the students in thesubjects.
4. To develop scientifictemperament.
5. To prepare the students for admission to higherstudies.
6. To encourage self-evaluation, personality development & guide the students to strive towards perfection andcompetence.

FACULTY PROFILE

FACULTY MEMBERS

At present the total member of sanctioned teaching staff is 3 .

S\N.	Name of Teaching Staff	Designation	Qualification	Teaching Experience in Period
1.	MR. DIBYAJYOTI DAS	HOD	M.Sc	1Years
2.	Miss SAIGEETA PRIYADARSHINI	Lecturer	M.Sc,	1 Years

BIO-DATA OF FACULTY MEMBER-1

NAME	**DIBYAJYOTI DAS**
QUALIFICATION	M.Sc.
REGISTRATION	
SPECIALIZATION	PISI CULTURE ECONMIC IMPORTANCE
DESIGNATION	Lecturer in zoology
PRESENT BASIC PAY	7500
DATE OF BIRTH	28.11.1997
DATE OF JOINING	01.07.23
PRESENT ADDRESS	AT/PO/VIA- Langaleswar, DIST- Balasore ODISHA 756024
PERMANENT ADDRESS	AT/PO/VIA- Langaleswar, DIST- Balasore ODISHA 756024.
SEMINAR ATTENDED	03

WORK SHOP ATTENDED	01
EXPERIENCE	1 Year
E-mail ID	djdas4567@gmail.com
CONTACT	9937257124

SEMINAR (INTERNATIONAL/NATIONAL/STATE) ATTENDED

Sl. N.	Nature: Seminar/ Conference	Organizing Institutions	Period	Topic
1	National level seminar	Nort Odisha University	13/11/19-14/11/19	National Symposium on Neuroscience (Recent Advances in Neuroscience and its application)
2.	National level seminar	DR. CV RAMAN UNIVERSITY	03.12.21-04.12.21	Effects on environment due to global warming and pollution.
3.	National Level seminar	Fakir Mohan University	11.10.22-11.10.22	Sloth Bear conservation in various parts in India.
4.	State level webinar	Remuna Degree College	13.10.23	Horseshoe crab Save our Life Can we??

BIO-DATA OF FACULTY MEMBER-2

NAME	**Miss Saigeeta Priyadarshini**
QUALIFICATION	M.Sc
SPECIALIZATION	Physiology,Biochemistry
DESIGNATION	Lecturer in zoology
PRESENT BASIC PAY	7500
DATE OF BIRTH	07.04.2000
DATE OF JOINING	21.07.2023
PRESENT ADDRESS	AT-Achuytapur PO- Narahari pur DIST-Balasore ODISHA 756019
PERMANENT ADDRESS	AT-Achuytapur PO- Narahari pur DIST-Balasore ODISHA 756019.
SEMINARATTENDED	02
WORKSHOPATTENDED	NIL
EXPERIENCE	1 years
E-mail ID	saigeetabeuty@gmail.com
CONTACT	8260340943

SEMINAR (INTERNATIONAL/NATIONAL/STATE) ATTENDED

Sl. N.	Nature: Seminar/ Conference	Organizing Institutions	Period	Topic	Attended/ Presented Paper
1	National level seminar	Berhampur University	17/11/18-18/11/18	Study on L.vaneemi cultivation	Attended

2.	National level seminar	Fakir Mohan University	11/10/2023 11/10/2023	Sloth Bear conservation in various parts in India	Attended
3.	State level Webinar	Remuna Degree College,Remuna	13.10.23	Horseshoe crab Save our Life Can we??.	Attended.

Faculty recharging strategies:

1. Regular trainings, workshops, seminars participation by ourfaculty.

2. Faculty developmentprogrammes

3. Scientific laboratory visits of the faculty foracclimatization

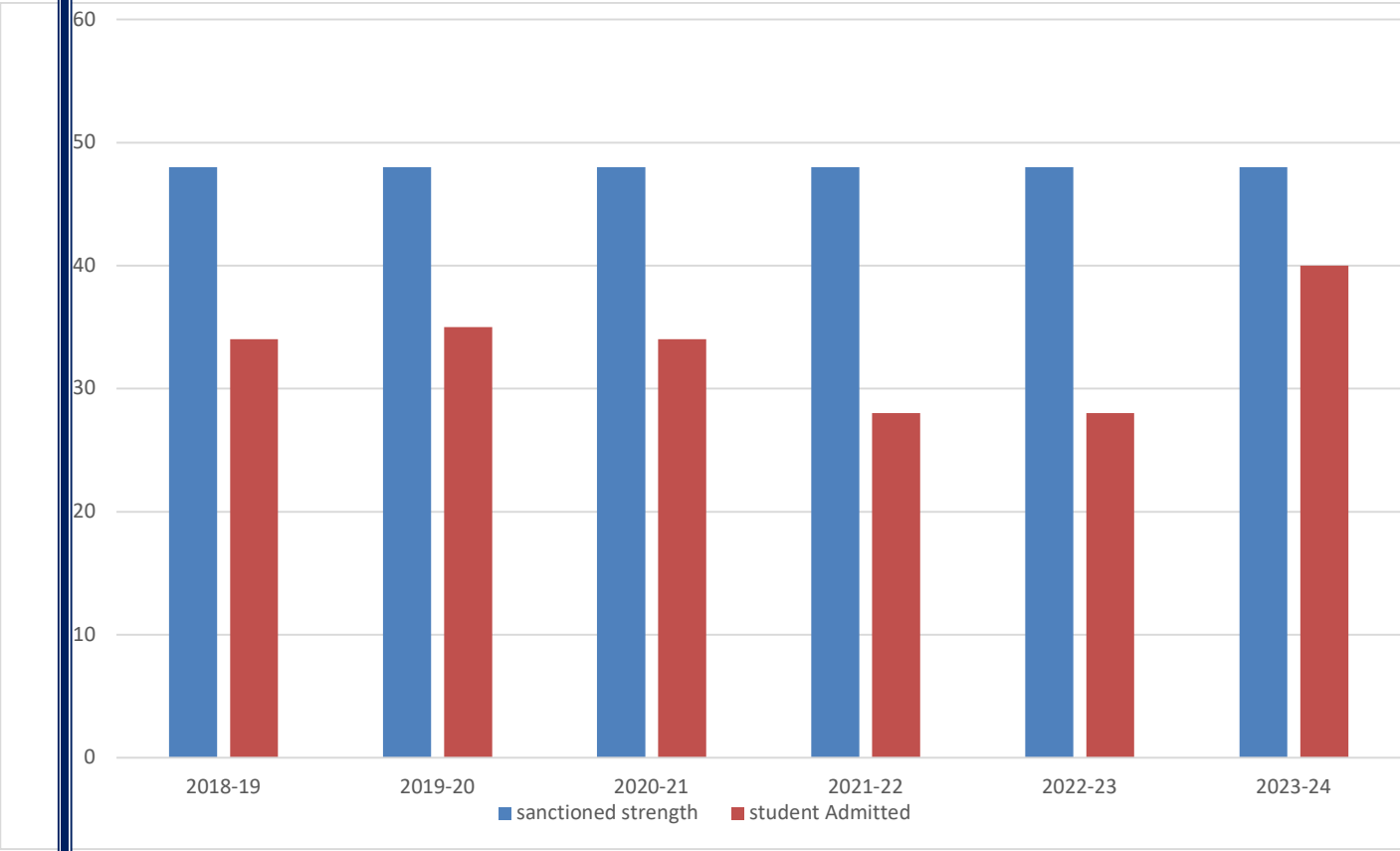
4. Opportunities for interaction with scientists through EquippedProgramme

STUDENTS PROFILE AND RESULT ANALYSIS

There are 48 Honours seats for +3 degree course. The minimum percentage for admission into department is the students securing 45% in aggregate and 45% in Zoology in CHSE. The following is the success rate of the students of the last 2 years.

Admission Data

Academic Session	Sanctioned Strength	Student Admitted
2018-19	48	34
2019-20	48	35
2020-21	48	34
2021-22	48	28
2022-23	48	28
2023-24	48	40



Result Analysis Admission batch 2020

Appeared	Total No of student appeared			No of student absent			Total No of student			1ST Class with Distinct ion			1st Class			2nd Class with Distinct ion			2nd Class			General without honours			Withheld			No of student pass			No of student fail		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
34	14	20	34	3	7	10	18	26	44	9	16	25	2	3	5	0	0	0	1	0	1	0	0	01	2	0	2	13	19	32	1	0	1

Result Analysis Admission batch 2021

Appeared	Total No of student appeared			No of student absent			Total No of student			1ST Class with Distinct ion			1st Class			2nd Class with Distinct ion			2nd Class			General without honours			Withheld			No of student pass			No of student fail		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
47	19	28	47	0	0	0	19	28	47	9	22	31	3	0	3	0	1	1	0	4	4	0	0	0	0	0	0	14	25	39	6	2	8

Result Analysis 2022

Appeared	Total No of student appeared			No of student absent			Total No of student			1ST Class with Distinction			1st Class			2nd Class with Distinct ion			2nd Class			General without honours			Withheld			No of student pass			No of student fail		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
35	12	23	35	0	3	3	12	26	38	6	20	26	1	1	2	0	0	0	1	1	2	0	0	0	0	0	0	9	22	31	3	1	4

Result Analysis 2023

Appeared	Total No of student appeared			No of student absent			Total No of student			1ST Class with Distinction			1stClass			2nd Class with Distinction			2nd Class			General without honours			Withheld			No of student pass			No of student fail		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
34	14	20	35	3	7	10	18	26	44	9	16	25	2	3	5	0	0	0	1	0	1	0	0	0	2	0	2	13	19	32	1	0	1

1. CURRICULUM ASPECTS

The curriculum of +3 Honors courses is taught by the faculty members of the department as per the syllabus prescribed by Fakir MohanUniversity.

HONOURS PAPERS: Core course – 14 papers .Practical -14 papers

Discipline Specific Elective(DSE) – 3 papers. Practical -3 papers.

Generic Elective for Non Zoology students – 4 papers. Practical -4 papers.

Skill enhancement course (SEC)-02 papers

Project paper (DSE) -01paper.

Course Structure of U.G. Zoology Honours
2019-2020

Syllabus for2019-2020

.

Semester	Course	Course Name
Semester-I	AECC I	AECC I
	Core I (Theory)	Non-chordates I:Protista to Pseudocoelomates
	Core I (Practical)	Non-chordates I:Protista to Pseudocoelomates
	Core II (Theory)	Perspectives of Ecology
	Core II (Practical)	Perspectives of Ecology
	GE 1 (Theory)	GE 1 (Theory)
	GE I (Practical)	GE I (Practical)
Semester-II	AECC 2	AECC 2
	Core III (Theory)	Non chordates II: Coelomates
	Core III (Practical)	Non chordates II: Coelomates
	Core IV (Theory)	Human phsiology

	Core IV (Practical)	Human phsiology
	GE II (Theory)	GE II (Theory)

	GE II (Practical)	GE II (Practical)
Semester-III	Core V (Theory)	Diversity of Chordates
	Core V (Practical)	Diversity of Chordates
	Core VI (Theory)	Physiology: Controlling and Coordinating systems
	Core VI (Practical)	Physiology: Controlling and Coordinating systems
	Core VII (Theory)	Comparative anatomy of Vertebrates
	Core VII (Practical)	Comparative anatomy of Vertebrates
	SEC 1	SEC 1
	GE III (Theory)	GE III (Theory)
	GE III (Practical)	GE III (Practical)
Semester-IV	Core VIII (Theory)	Fundamentals of Biochemistry microbiology

	Core VIII (Practical)	Fundamentals of Biochemistry .
	Core IX (Theory)	Cell biology.
	Core IX (Practical)	Cell biology.
	Core X (Theory)	Principle of genetics.
	Core X (Practical)	Principle of genetics.
	SEC 2	SEC 2 (Research Methodology)
	GE IV (Theory)	GE IV (Theory)
	GE IV (Practical)	GE IV (Practical)
Semester-V	Core XI (Theory)	Molecular Biology
	Core XI (Practical)	Molecular Biology
	Core XII (Theory)	Fundamentals of Biochemistry
	Core XII (Practical)	Fundamentals of Biochemistry

	DSE I (Theory)	DSE 1 Animal behaviour
	DSE I (Practical)	DSE 1
	DSE II (Theory)	DSE II Immunology
	DSE II (Practical)	DSE II
Semester-VI	Core XIII (Theory)	Developmental Biology
	Core XIII (Practical)	Developmental Biology
	Core XIV (Theory)	Evolutionary Biology
	Core XIV (Practical)	Evolutionary Biology
	DSE III (Theory)	DSE III Wild life conservation
	DSE III (Practical)	DSE III
	DSE IV (Theory with Practical /Project)	Project

Syllabus for session 2020-23

Course Structure of U.G. Zoology Honours				
Semester	**Course**	**Course Name**	**Credit**	**Total marks**
Semester-I	AECC I	AECC I	4	100
	Core I (Theory)	Non-chordates I:Protista to Pseudocoelomates	4	75
	Core I (Practical)	Non-chordates I:Protista to Pseudocoelomates	2	25
	Core II (Theory)	Principles of Ecology	4	75
	Core II (Practical)	Principles of Ecology	2	25
	GE 1 (Theory)	GE 1 (Theory)	4	75
	GE I (Practical)	GE I (Practical)	2	25
Semester-II	AECC 2	AECC 2	4	100
	Core III (Theory)	Non chordates II: Coelomates	4	75
	Core III (Practical)	Non chordates II: Coelomates	2	25
	Core IV (Theory)	Cell biology	4	75
	Core IV (Practical)	Cell biology	2	25
	GE II (Theory)	GE II (Theory)	4	75
	GE II (Practical)	GE II (Practical)	2	25
Semester-III	Core V (Theory)	Diversity of Chordates	4	75
	Core V (Practical)	Diversity of Chordates	2	25
	Core VI (Theory)	Physiology: Controlling and Coordinating systems	4	75
	Core VI (Practical)	Physiology: Controlling and Coordinating systems	2	25
	Core VII (Theory)	Fundamentals of Biochemistry and microbiology	4	75
	Core VII (Practical)	Fundamentals of Biochemistry and microbiology	2	25
	SEC 1	SEC 1 (Mushroom cultivation)	4	100
	GE III (Theory)	GE III (Theory)	4	75
	GE III (Practical)	GE III (Practical)	2	25

Semester-IV	Core VIII (Theory)	Comparative anatomy of Vertebrates	4	75

	Core VIII (Practical)	Comparative anatomy of Vertebrates	2	25
	Core IX (Theory)	Physiology: Life Sustaining Systems	4	75
	Core IX (Practical)	Physiology: Life Sustaining Systems	2	25
	Core X (Theory)	Biochemistry of Metabolic Processes	4	75
	Core X (Practical)	Biochemistry of Metabolic Processes	2	25
	SEC 2	SEC 2 (Biofertilizer)	4	100
	GE IV (Theory)	GE IV (Theory)	4	75
	GE IV (Practical)	GE IV (Practical)	2	25
Semester-V	Core XI (Theory)	Molecular Biology	4	75
	Core XI (Practical)	Molecular Biology	2	25
	Core XII (Theory)	Principles of Genetics	4	75
	Core XII (Practical)	Principles of Genetics	2	25
	DSE I (Theory)	DSE 1 Animal Behaviour	4	75
	DSE I (Practical)	DSE 1	2	25
	DSE II (Theory)	DSE II Immunology	4	75
	DSE II (Practical)	DSE II	2	25
Semester-VI	Core XIII (Theory)	Developmental Biology	4	75
	Core XIII (Practical)	Developmental Biology	2	25
	Core XIV (Theory)	Evolutionary Biology	4	75
	Core XIV (Practical)	Evolutionary Biology	2	25
	DSE III (Theory)	DSE III Wildlife Conservation and Management	4	75
	DSE III (Practical)	DSE III	2	25

	DSE IV (Theory with Practical /Project)	Project/ Economic Zoology	6	100

Programme Outcomes

1. Demonstrate, solve and an understanding of major concepts in all disciplines ofZoology.
2. Solve the problem and also think methodically, independently and draw a logicalconclusion.
3. Understand the evolution, history ofphylum.
4. Create an awareness of the impact of Zoology on the environment, society, and development outsidethe scientificcommunity.
5. To study and understand the classification of whole phyla includes in Non chordates with the helpof charts/models/pictures.
6. To inculcate the scientific temperament in the students and outside the scientificcommunity.

Programme Specific Outcomes

1. Gain the knowledge of Zoology through theory andPractical's.
2. Study and understand the DNA Recombinanttechnology.
3. Understand the testing ofhypothesis.
4. Use modern Zoological tools, Models, Charts andEquipment's.
5. Know structure-activityrelationship.
6. Understand good laboratory practices andsafety.
7. Develop Research orientedskills.
8. Make aware and handle the sophisticatedinstruments/equipment's.

Course Specific Outcome of Zoology.

Semester	Paper /Course	Name of the Paper/Corse	Course Outcome
	CC-1	Non chordates I: Protista to Pseudocoelomates	1. Understand the evolution, history ofphylum. 2. Understand about the Non-Chordateanimals. 3. To study the external as well as internal characters of nonchordates. 4. To study the distinguishing characters ofinvertebrates. 5. Comprehend the economic importance of non-chordates, their interaction with the environment and role in theecosystem. 6. Enhance collaborative learning and communication skills through practical sessions, team work, group discussions, assignments andprojects.
Semester-1	CC-2	Principles of Ecology	1. Know the biotic and abiotic components of ecosystem. 2. Food chain & food web in ecosystem. 3. To Understand what makes the scientific study of animal ecology a crucial and excitingendeavour. 4. Understand Animal community &ecological adaptation inanimals. 5. Students gains knowledge about statistical methods like measures of central tendencies,Probability 6. Learns about hypothesis testing and inferentialstatistics 7. Learns the problem-solvingmethods.
	GE	Animal Diversity	1. Understand diversity among various groups ofanimal kingdom 2. Scope, importance and management of biodiversity.
S	CC-3	Non chordates II: Coelomates	1. Learn about the importance of systematics, taxonomy and structural organization ofanimals. 2. Understand evolutionary history andrelationships of different non-chordates through functional and structuralaffinities. 3. Critically think about the organization, complexityand characteristic features of non-

e m es te r- 2			Chordates.
	CC-4	Cell biology	1. Understand fundamental principles of cellbiology. 2. Explain structure and functions of cell organelles involved in diverse cellular processes. 3. Understand the functioning of nucleus and extra nuclear organelles and understand the intricate cellular mechanismsinvolved.

			4. Acquire the detailed knowledge of different pathways related to cell signalling.
	GE 1-P-I	Food, Nutrition and Health	1. Have a better understanding of the association of food and nutrition in promoting healthy living. 2. Think more holistically about the relationship between nutrition science, social and health issues.
	CC-5	Diversity of Chordates	1. Understand different classes of chordates, level of organization and evolutionary relationship between different subphyla and classes, within and outside thephylum. 2. Study about diversity in animals making students understand about their distinguishing features. 3. Appreciate similarities and differences in life functions among various groups of animals in PhylumChordata.

Semester-3	CC-6	Physiology: Controlling and Coordinating systems.	1. Recognize and explain how allphysiological systems work in unison to maintain homeostasis in the body and use of feedback loops to control thesame. 2. Learn an integrative approach to understand the interactions of various organ systems resulting in the complex overall functioning of thebody. 3. Synthesize ideas to make connection between knowledge of physiology and real world, situations, including healthy life style decisions and homeostaticimbalances. 4. Know the role of regulatory systems viz. endocrine and nervous systems and their amalgamation in maintaining various physiological processes.
	CC-7	Fundamentals of Biochemistry and microbiology	1. Understand the structure and biological significance of carbohydrates, amino acids, proteins andlipids. 2. Understand the structure and function of immunoglobulins. 3. Understand the concept of enzyme, its mechanism of action andregulation. 4. Demonstrate foundation knowledge in biochemistry; synthesis of proteins, lipids, nucleic acids, and carbohydrates; and their role in metabolic pathways along with theirregulation. 5. Develop understanding on themicrobiology diversity, processes and applications in the environment.
	SEC-1	Mushroom Cultivation	1. To gain knowledge of cultivation of different types of ediblemushrooms. 2. To understand nutritional value of edible mushrooms. 3. It helps to study storage and marketing of edible ofmushroom.

Semester-4	CC-8	Comparative anatomy of Vertebrates	1. Upon completion of the course, students should be able to: Explain comparative account of the different vertebratesystems. 2. Understand the pattern of vertebrate evolution, organisation and functions of varioussystems. 3. Learn the comparative account of integument, skeletal components, their functions and modifications in different vertebrates. 4. Understand the evolution of heart,modification in aortic arches, structure of respiratory organs used in aquatic, terrestrial and aerial vertebrates; and digestive system and its anatomical specializations with respectto different diets and feeding habits.
	CC-9	Physiology: Life Sustaining Systems.	1. understand how the body works, State the functions of each organ system of the body, explain the mechanisms by which each functions and relate the functions and the anatomy and histology of each organsystem. 2. Recognize and explain how all physiological systems work in unison to maintain homeostasis in the body; and use of feedback loops to control thesame. 3. Learn an integrative approach to understand the interactions of various organ systems resulting in the complex overall functioning of thebody.
	CC-10	Biochemistry of Metabolic Processes	1. Gain knowledge and skill in theinteractions and interdependence of physiological and biomolecules 2. Understand essentials of the metabolic pathways along with theirregulation. 3. Know the principles, instrumentation and applications of bioanalyticaltechniques. 4. Understand the structure and biological significance of carbohydrates, amino acids, proteins andlipids.
	SEC-2	Biofertilizer	1. Develop their understanding on the concept of bio-fertilizer. 2. Identify the different forms ofbiofertilizers and theiruses. 3. Compare between the Green manuring and organicfertilizers.

Semester-5	CC-11	Molecular Biology.	1. Describe the basic structure and chemistry of nucleic acids, DNA and RNA; 2. Compare and contrast DNA replication machinery and mechanisms in prokaryotes and eukaryotes. 3. Elucidate the molecular machinery and mechanism of information transfer processes– transcription (formation of RNA from DNA) and translation (formation of proteins from RNA) - in prokaryotes andeukaryotes. 4. Explain post-transcriptional modification mechanisms for the processing ofeukaryotic

			RNAs; and to Give an overview of gene expression regulation in eukaryotes.
	CC-12	Principles of Genetics	1. Apply the principles of Mendelianinheritance 2. Understand the cause and effect of alterations in chromosome number andstructure 3. Gain knowledge of the basic principles of inheritance.

	DSE-1	Animal Behaviour, Animal Biotechnology and Endocrinology	1. Learn a wide range of theoretical and practical techniques used to study animalbehaviour. 2. Upon completion of the course, students should be able to understand types of animal behaviour and their importance to theorganisms. 3. Enhance their observation, analysis,interpretation and documentation skills by taking short projects pertaining to Animal behaviour and chronobiology. 4. Understand various process of chronobiology in their daily life such as jet lag and Learn about the biologicalrhythm. 5. Use or demonstrate the basic techniques of biotechnology like DNA isolation, PCR, transformation, restriction digestionetc 6. Understand endocrine system and the basic properties of hormones. 7. Appreciate the importance of endocrine system and the crucial role it plays along with the nervous system in maintenance of homeostasis. 8. Gain insight into the molecular mechanism of hormone action and its regulation and to know the regulation of physiological process by the endocrine system and its implication indiseases.
	DSE-2	Basic of Neuroscience, Reproductive Biology and Immunology	1. Understand major advances in neuroscience, neural basis of emotions, behaviour, learning and memory, and how brain and behaviour can be trained/modified byexperience. 2. Discuss how the hypothalamus controls various behavioural patterns by releasing neurohormones/ neuropeptides in brain and periphery in response to various signals. 3. Get in-depth understanding ofmorphology, anatomy and histology of male and female reproductiveorgans. 4. Know different processes in reproduction starting from germ cell formation to fertilization and consequent pregnancy, parturition and lactation and Campare estrous and menstrual cycles and their hormonal regulation. 5. Describe the basic mechanisms,

			distinctions and functional interplay of innate andadaptive immunity 6. Define the cellular/molecular pathways of humoral/cell-mediated adaptiveresponses

			including the role of Major Histocompatibility Complex and explain the cellular and molecular aspects of lymphocyte activation, homeostasis, differentiation, and memory. 7. Understand the molecular basis of complex, humoral (Cytokines and Complement) and cellular processes involved in inflammation and immunity, in states of health anddisease.
	CC-13	Developmental Biology	1. Develop critical understanding how a single-celled fertilized egg becomes an embryo and then a fully formed adult by going through three important processes of cell division, cell differentiation and morphogenesis. 2. Understand how developmental processes and gene functions within a particular tissue or organism can provide insight into functions of other tissues andorganisms. 3. Describe the general patterns and sequential developmental stages during embryogenesis; and understand how the developmental processes lead to establishment of body plan of multicellular organisms.

			4. Develop the skill to raise and maintain culture of model system; Drosophila in thelaboratory.
Semester-6	CC-14	Evolutionary Biology	1. Understand the evidences of organic evolution by anatomical embryological list, paleontological, physiological, genetics and molecular biologyevidences. 2. Understand theories of organic evolution, isolation,speciation. 3. Gain knowledge about the relationship of the evolution of various species and the environment they livein. 4. Use knowledge gained from study of variations, genetic drift to ensure thatconservation efforts for small threatened populations are focused in right direction.
	DSE-3	Fish and Fisheries, Wildlife Conservation	1. After completion of the course the students will be able to: Acquire knowledge of physiology, reproduction offishes. 2. Become aware and gain knowledge of Inland and marine Fisheries in India and how it contributes to Indianeconomy. 3. Know about different kinds of fishing methods and fish preservation which can be employed for export and storage of commercial fishes. 4. Become aware about the importance of wildlife in general, and its conservation and management in particular. 5. Comprehend the application of the principles of ecology and animal behaviour to formulate strategies for the management of wildlife populations and theirhabitats.

			6. Understand the management practices required to achieve a healthy ecosystem for wildlife population along with emphasis on conservation andrestoration. 7. Knowthekeyfactorsforlos sofwildlifeand important strategies for their in situ and ex situconservation.	
	DSE-4	Project Paper	1. Make researchproposal. 2. Construct tool of data collection. 3. Learn fieldworkmodalities. 4. Understand the process of dataanalysis 5. Writing research report.	

Opportunities

The various fields are offering better job opportunity after passing B.Sc in Zoology. Some of the high demand sectors are given below where job prospects are huge.

- Ecologist
- Marine Biologist
- Public Health Specialist
- Researcher &Scientist
- Zookeeper
- Forensic science
- Biochemist
- Animal lab technician
- Higher studies (M.sc in Zoology ,Mphil,PhD, MBA in Health Management etc)
- Aquaculture

2.Teaching- Learning and Evaluation

Innovative TeachingMethods

1. Chalk and talkmethod
2. Lecturemode
3. Power pointPresentations.
4. Quality-based models for classroom instruction and teaching.
5. Technology aided lectures, demonstration, group discussions and educational tours, projectworks.
6. Cooperative learning : instruction that involves students working in teams to accomplish an assigned task and produce a final product.
7. Participation in Institutional Social Responsibility (ISR) and Extensionactivities:
8. Practical methods are explained byvirtually.
9. Type of ICT TOOLs and resources generated/available in the department - Projector with interactive whiteboards ,PPT, Prints ,audio-video tapes ,CDs, online MCQs exam, Questionbank.
10. Other E-resources and techniques used in teaching –E Liberary ,E journal, Podcasting ,Ebooks.

Analysis of the department:

Strength:

1. Cordial relationship between teachers and students andparents
2. Efficient, sincere and hardworking team of faculty members, many of whom have talentsother thanteaching.
3. Excellent academic results with consistentpercentage
4. Scholasticenvironment.
5. Obedient and sincere students.

Weakness:

1. Need for additional laboratory for Instrumentation/Research.
2. Need to improve scientific temperament for research activities among UGstudents.
3. Less no. ofFaculties.

Opportunities:

1. Courses in Various Field of Zoology.
2. Scope for field based researchactivities.
3. Knowledge of multidisciplinaryfields.
4. Availability of good libraryfacility.

Challenges:

1. To make the Department as the Center ofexcellence.

2. Progressive development by introducing sufficient no. of Laboratory equipment,an

additional seminar libraryetc.

3. Conduction of National level Seminars, conferences andWorkshops.

4.Placement opportunities forstudents.

5. Preparation of students to get ranks in national levelexams.

6. Establish proactive and collaborative approach to enhance the departmentalprofile.

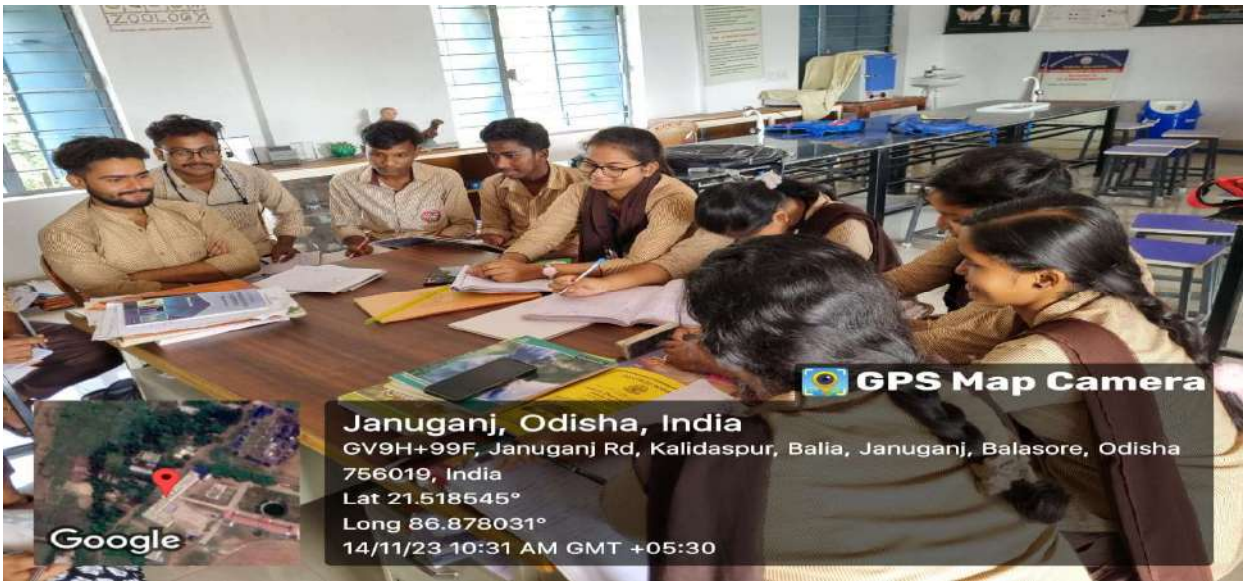
ICT enabled tools for effective teaching-learning process.

Department Faculty uses projector with interactive whiteboards ,PPT classes, Prints ,audio-video tapes ,CDs, conduct online MCQs exam, Question banks, classes on google meet ,and pdfs and study material sharing in google classroom and departmental mail and official departmenatal whatapps groups for strengthening teaching learning process.

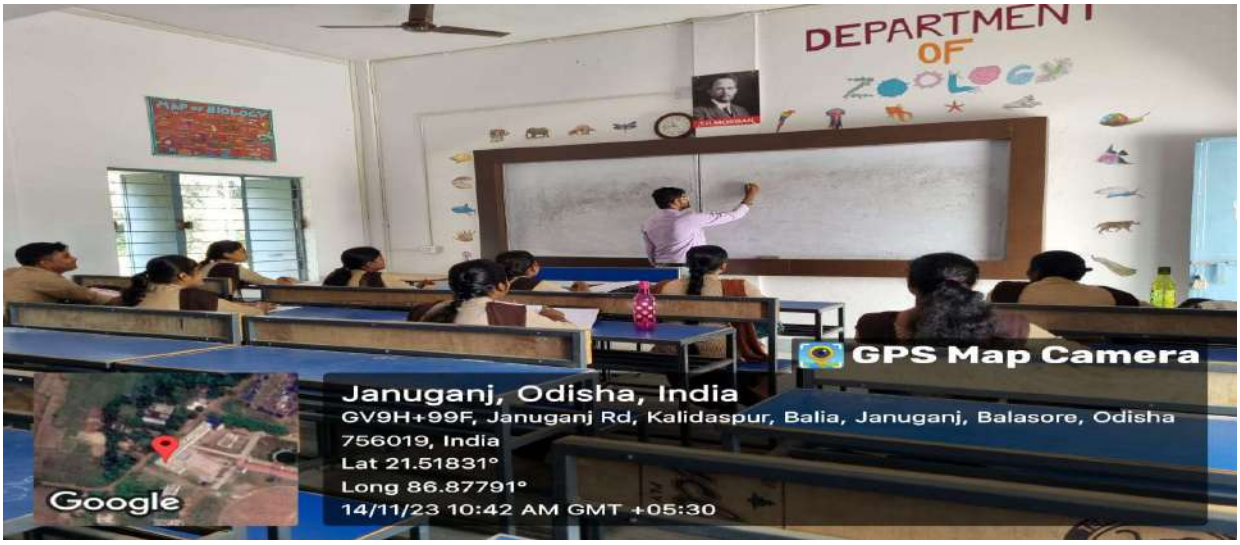
Slow and advanced learner teaching.

Department identify slow and advance learner on the basis of their performance in semester examination, mid term examination, unit test ,surprise test etc. Remedial classes and doubt clearing classes were also conducted by the department .for the slow learner ,reteaching of the topic, and assignments ,small project work ,group discussions,MCQ s , open book test, this all strategies were adopted. For advance learner , entrance related question answer session, Disscussion of model question papers ,project and practical skill development classes were conducted .

Advance learner classroom teaching.



Group Disscussion.



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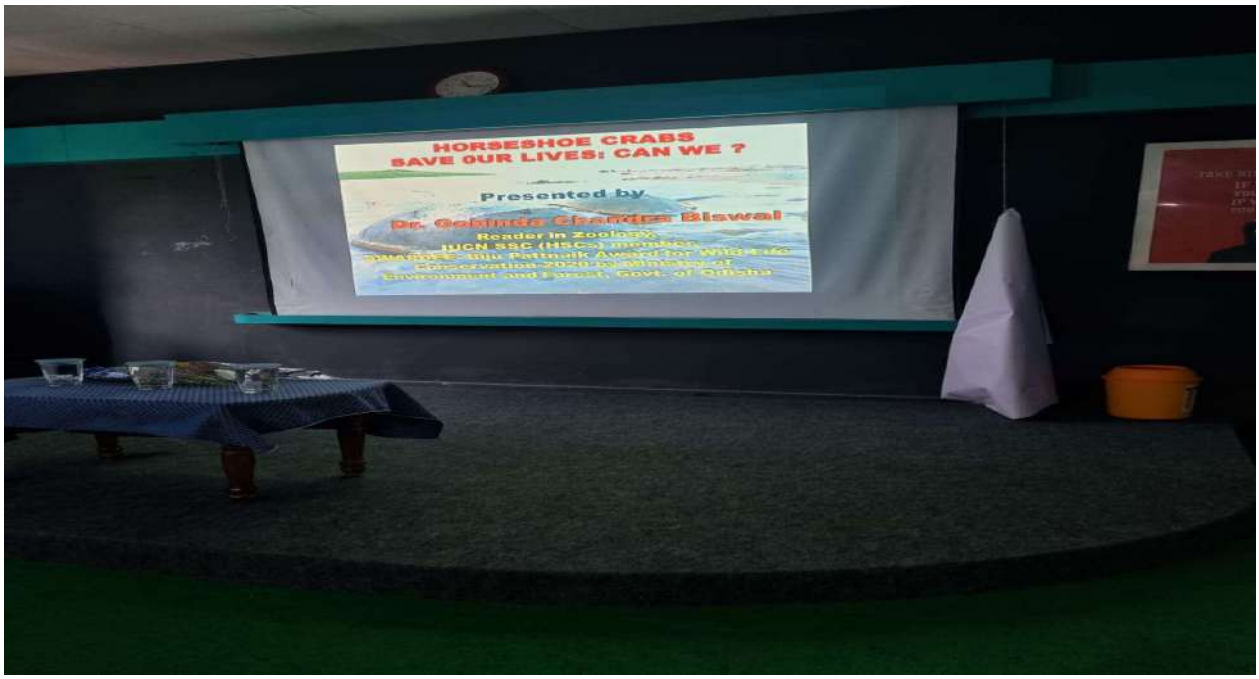
Bridge course

Bridge Course for newly admitted Zoology students is sketched to be conducted before the commencement of the first semester classes by the Department of Zoology. A Curriculum is framed with five modules and it contains an introductory approach to zoological study and its importance, scope and basic applications. The curriculum aims to familarize students with Bsc. Zoology core and elective syllabus. It is a seven hour module, with 1.5 hour allotted to the first 4 modules and 1 hour allotted to 5^{th} module in class room teaching.

DEPARTMENTAL SEMINAR.



from 4.00 pm to 5.30 pm. 1st session was presented by eminent chief speaker Dr. Gargee Mohanty, Asst. prof., Dept. of zoology, North Orissa University,Baripada, Odisha. 2nd session was presented by esteemed speaker Dr. Dillip kumar Bej ,Asst. prof, Dept. of zoology, F.M. autonomous college, Balasore, Odisha. About 99 participants joined through the google meet and about 260 participants joined through youtube link. At the end of the session, about 116 feedback responses were recorded and E- certificate were provided to all the participants. there were about 24 faculties and 163 students who had participated in thiswebinar.

Field visit to "Dhruvi aquaculture and fishery" and to mushroom cultivation farm on 23.11.22.

Participation in Institutional Social Responsibility (ISR) and Extension activities and students achievement .

Our department has a healthy tradition in organizing a number of activities outside the course curriculum.

- **Welcome and farewellceremony**

The students of the departments organise colourful welcome ceremony every year in which the new comers get introduced with the senior students of the department. The principal and other faculties are invited to address and encourage the students. The farewell ceremony is organised every year to bid valediction to the outgoing students of the Department. In this function all the students share their feelings.

- **Celebration and observation**

In our department the students celebrate Lord Ganesh Puja, Saraswati puja with religious fervor and National days like Teachers Day during

the academic year. All the students participated in the celebrations under the guidance of the faculty.

- **Picnic and fieldtours**

The department also organises students picnic and field tours every year. By visiting new places and meeting people the students get acquire knowledge on various fields and enrich their personal experiences. The mental horizon of the students gets widened as well. They also get practical experiences and develop self confidence.

Extension activities and students achievement

1. SPORTS

The department of the institution not only excel themselves in curricular activities but also in extra-curricular activities. Our student **Abhijit mandal ,** has won **Sports champion Trophy in 2019** in our college.

Smruti ranjan rout has participated in national level kabbadi.

Sai parkash mahala have been selected in state level Taekwondo in 2020.

laxmi majhi has won 2rd position in 5000 mtr at inter college athletic meet 2018 -2019.and 3rd prize in 1500 mtr at at inter college athletic meet 2018 -2019.

Avijit mandal of UG 1st year receiving champion trophy on annual function.

2. NSS

The students of our college have been volunteers of National Service Scheme. They have participated in various camps and proved their excellence**. Manisha sahu** has won 2nd prize in manali NSS camp participating in dance competition in 2022.

3.NCC

The students of our department have been volunteers of National Cadet corps. They have participated in various camps and proved their excellence.**Laxmi majhi** has achieved 3rd position in (4x100) relay event held in BCPE,balasore at inter college athletic meet 2019.

laxmi majhi receiving prize at inter- college athletic meet 2023


Student participating in NCC Rifle drill held on 17.02.20-18.02.20 at Bhadrak autonomous college.

4. YRC

Our student **Abhisek sahoo** participated in blood donation camp held on 03.11.22 at Remuna degree college.

5. PAINTING ANDRANGOLI

Pralipta parida has won 3rd position in painting on state youth level festival.

She has also received 2nd prize in rangoli competition organized by Rashtriya kala manch on 8th dec'2022

Tejaswini rana of UG 2nd year has won **3rd prize** in cartoon-caption competition held Collector's conference hall on 18.01.22 based on theme "**Electoral literacy for strongerDemocracy."**

Swarnjit Barik of UG 2nd year has won **2nd prize** in cartoon-caption competition held Collector's conference hall on 18.01.22 based on theme "**Electoral literacy for strongerDemocracy**

Pralipta parida receiving 2nd prize in rangoli competition.

STUDENTS ACHIEVEMENTS IN VARIOUS CO-CURRICULAR AND EXTRA CURRICULAR ACTIVITIES.

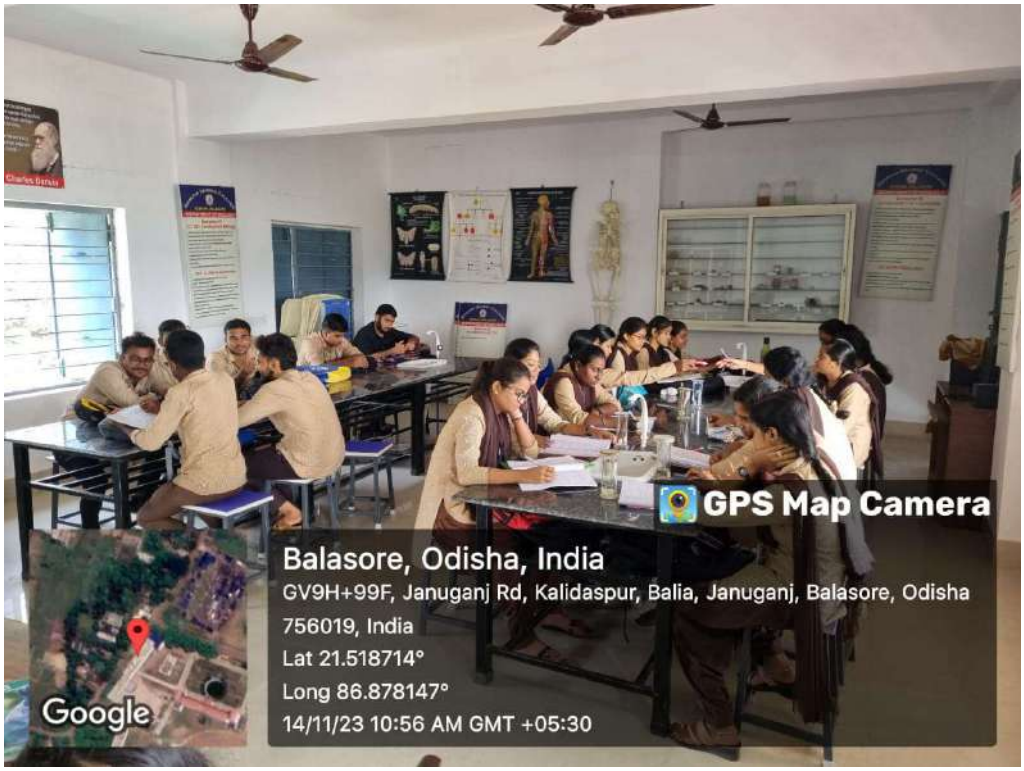
Sl.No.	Name of the Students	Roll No.	Name of the awards/Prizes
01	LaxmiMajhi	BS(B)17-179	2nd prize in University level inter college athletic meet. 3rd prize in sports(university level)
02	ManishaSahu	BS(B)18-283	1st prize in state level cultural program.
03	PraliptaParida	BS(B)18-307	3rd prize in state youth level festival 2019
04	SmrutiRanjan Rout	BS(B)19-079	1st in State Kabaddi Championship-2021, participated in 4thKabaddi Championship games and sports 2021 Goa, 69th Senior State Kabaddi Championship 2021-Sundargarh.
05	SaiprakashMahala	BS(B)19-043	All India university level Taekwondo Participation certificate.
06	AnkitaMajumdar	BS(B)19-077	Rank 9 in the World Shotokan Karate, 1st with distinction certificate in drawing from Odisha Lalit Kala Academy. Harapriyadevismruti puraskar in Odishi from Nrutyasangeet kalamandir. special jury award in odishi from All Odisha

			Odishi Dance competition (sub-junior group 2015)
07	Ankita Das	BS(B)19-92	1st prize in English debate (YRC) 2nd prize in English essay (YRC) 3rd prize in song (RDC got talent)
08	NikitanjaliBarik	BS(B)19-87	2nd prize in dance, district & state level odishi and folk dance
09	Suchismita Das	BS(B)19-100	Finalist of "Crown times Miss India 2021 online pageant"
10	Dibyasha Rout	BS(B)20-014	1st in English Debate (RDC got talent 2021) 1st in English Essay (RDC got talent 2021) 1st in block level debate competition 1st in elocution competition
11	MrutyunjayPattanayak	BS(B)20-086	3rd in Quiz (RDC got talent 2021) 3rd in Women's Day Painting competition
12	AvilipsaPakal	BS(B)20-102	2nd in Odia Essay(RDC got talent 2021)
13	RutuparnaGiri	BS(B)20-089	3rd in Yoga (RDC got talent 2021)
14	PayalChaudhuri	BS(B)21-002	3rd in Odia debate (RDC got talent 2021)
15	KiranPrava Das	BS(B)21-021	3rd in English debate (RDC got talent 2021)
16	Swati Mishra	BS(B)21-006	2nd in Rangoli& 3rd in Aalpona(RDC got talent 2021)
17	Mousumi Majhi	BS(B)21-079	2nd in Shot Put Inter college championship 2023
18	Pragyan paramita Parida	BS(B)21-100	2nd in 100m race Inter college championship 2023
19	Rashmi Ranjan Sethi	BS(B)21-028	Selected in Kabbadi Inter college championship 2023
21	Jasmin Parida	BS(B)23-017	2nd in 200m race long jump inter college
20	Ritu raj Behera	BS(B)22-079	Selected in Kabbadi Inter college championship 2023

4. Infrastructure and Learning Resources.

Department has 2 laboratory, ICT enabled departmental classroom, Departmental library .

Museum specimen in laboratory



Zoology laboratory 1

Department wall magazine

Zoology Laboratory-2

5. Student Support andProgression.

Name of the Students who received scholarships

Sl.No.	Name of the student	Roll No.	Name of the Scholarship
01	AnkitaPothal	BS(B)19-076	State Scholarship
02	Ankita Das	BS(B)19-092	State Scholarship
03	KadambiniSethi	BS(B)19-026	State Scholarship
04	Mampi Das	BS(B)19-102	State Scholarship
05	JasaobantaMurmu	BS(B)19-020	State Scholarship
06	SushriItisikhaBonaliMoalik	BS(B)19-058	State Scholarship
07	JyotirmayeePattayat	BS(B)19-022	State Scholarship
08	Jyotishree Nanda	BS(B)19-083	e-Medhabruti
09	JyotiJeebanGiri	BS(B)19-021	State Scholarship
10	NabajyotiNayak	BS(B)20-105	Prerana Scholarship
11	Chiranjib Ku Jena	BS(B)20-037	Prerana Scholarship
12	Jyoti Das	BS(B)20-021	Prerana Scholarship
13	DiptiraniPatra	BS(B)20-077	State scholarship
14	SaismitaSahoo	BS(B)20-051	State scholarship
15	Swarnaprava Das	BS(B)20-116	State scholarship
16	Amisha Rout	BS(B)20-080	e-Medhabruti
17	Vivek Ku. Rana	BS(B)20-090	e-Medhabruti
18	ShibajitBehera	BS(B)21-067	State Scholarship

SOME DEPARTMENTAL ACTIVITIES AT A GLANCE

1. Students attending career counseling programme on08.07.19

2. Students attending Gender equity programme organized by NOCCi on24.07.19

3. 1st year students attending library induction workshop on21.10.19.

4. students of department attending career counselling programme on29.11.19.

5.Students attending career counselling and placement programme on marine industriesorganized by NOCCi on 05.02.20

6. Faculties and students attending National conference on topic "Trends and progress in animal sciences "at FM university held on 05.02.20 and06.02.20.

7. Students participating in science exhibition held on28.02.21

9.Students attending departmental career counseling programme held on06.11.21.

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Higher study report of students

SL.NO	NAME OF THE STUDENT	PASS OUT YEAR	PURSUING HIGHER COURSE	NAME OF THE INSTITUTION JOINED
1	Ajay Kumar Mandal	2019	M.Sc. in Zoology	Central university,Jharkhand
2	Sailee A Awadhane	2019	M.Sc. in Zoology	Pune university
3	SatyaSauravSahoo	2019	M.Sc. in Zoology	Samabalpur university
4	Minakshi Parhi	2019	MBA	FM university
5	JyotiRanjan Chand	2019	MCA	North Orissa university
6	Subhashree Das	2019	MHA	KIIT University
7	RojalinaNayak	2019	M.Sc. in Environmental Science	Utkal University
8	GopinathMohapatra	2019	MBA	Lovely Professional University
9	Minakshi Parhi	2019	MBA	FM University
10	MadhusmitaNayak	2020	M.Sc. Zoology	Rayagada College
11	BhagyashreeBehera	2020	M.Sc. in Life Science	SKCG Gajapati
12	BhagyashreeGiri	2020	MBA	FM University
13	RojalinSahoo	2020	M.Sc. in Zoology	VikramDev Autonomous College
14	SubhamMallick	2020	MCA	ABA College, Balasore
15	SanketSuman Das	2021	M.Sc. in Zoology	CenturionUniversity,BBSR
16	Amisha Rout	2023	M.Sc. in Zoology	Mpc. college
17	Himani Padhi	2023	M.Sc. in Zoology	KKS Womens college
18	Deepak kumar padhi	2023	M.Sc. in Zoology	FM University
19	Swarnaprava das	2023	M.Sc. in Zoology	FM Auto college
20	Subhodip Fouzar	2023	M.Sc. in Zoology	IMMT Cuttack

Student Placement Record (Govt./Non Govt.)

Students Roll No	Name of the Students	Admission Batch	Name of Organization joined
BS 17-179	Laxmi Majhi	2017	Joined as Q.C Technologist Marine industry Company name-Aquamarine Odisha,Chandipur,Balasore.

Dibyajyoti Das, lecturer in zoology attending induction training programme organzised by PG Department of Bioscience at FM University on advance techniques in lifescience held on 11.10.23.

6. BESTPRACTICE

Blood group test organized by department as Best practice on 14.02.20.


GPS Map Camera
Januganj, Odisha, India
GV9H+99F, Januganj Rd, Kalidaspur, Balia, Januganj, Balasore, Odisha 756019, India
Lat 21.518523°
Long 86.878146°
14/11/23 10:31 AM GMT +05:30
Google

7. Future Action plan of department

1. Applying for Research Projects on Zoology and ConservationBiology.
2. Organization of National Conference andWorkshop.
3. A training centre to develop awareness about environmental degradation as well as danger and cruelty toanimals.
4. Establish proactive and collaborative approach to enhance the departmental profile
5. To conduct more number of Syllabus oriented seminars from thestudents.
6. Students involvement in various committees to encourage participativefunctioning.